

## PROPOSAL PAPER

### Independent Technical Panel on Demand Management Measures Final Report on California Landscape Water Use 12/11/2015 Draft

#### Section #: 6

#### Section Title: MWELO Future Revisions & Process Updates

#### Recommendation #: 1

Authors: Ed Osann

#### Background:

In response to the Governor's emergency water conservation Executive Order in April, 2015, DWR undertook an extensive and expedited revision of the State Model Water Efficient Landscape Ordinance (MWELO). The ITP contributed a set of recommendations to DWR during the revision process in the summer of 2015. Many, but not all, of the ITP's suggested revisions were integrated into the new MWELO, released in July, 2015. DWR has expressed a desire to regularly update MWELO to ensure that the ordinance stays relevant while advancing water conservation and efficiency. The following recommendations section details two sets of recommendations to support DWR in this goal: 1) specific recommendations for future MWELO revisions that will continue to maximize landscape water savings; and 2) general recommendations to increase the scope and impact of MWELO, as well as to maximize the likelihood of implementation and enforcement.

#### Recommended Action:

To increase the efficacy and relevance of MWELO, it is recommended that DWR incorporate the proposed changes to MWELO in Table 1 below in the next revision of MWELO. This recommendation presumes that DWR will start the next round of revisions with an existing, internal draft that includes updates already slated to be considered for the next MWELO review.

It is also recommended that DWR take broader action with respect to MWELO by expanding the role of MWELO to set higher standards for existing landscapes and by coordinating MWELO revisions with CalGreen triennial updates to maximize enforcement mechanisms (see Table 2 recommendations).

The recommended revisions are intended to strengthen the power of MWELO, when implemented and enforced, to shape functional, high value, multi-benefit landscapes.

#### Proposal:

The following two tables present a range of potential future MWELO revisions. Recommendations are a compilation of [public comment recommendations](#) and ITP Final recommendations that were not accepted during the July, 2015 revision of MWELO. Previously submitted recommendations were largely not accepted because they were outside the language of Governor Brown's April 1, 2015 Executive Order B-29-15 and/or the complexities of the proposals required more vetting by stakeholders than could be accomplished in the expedited timeframe for the 2015 MWELO update.

**Table 1:** Specific recommendations for future MWELO revisions; an (ITP) annotation indicates the recommended revision was pulled directly from the final set of Draft ITP MWELO Recommendations

Topic & Recommendation	References	Language	Justification
<b>Applicability</b> – expand MWELO triggers for existing landscapes to include high-cost building renovations	\$490.1	(ITP) addition: (a)(3) <u>existing landscapes with a landscape alteration greater than 500 square feet associated with any additions</u>	This additional MWELO cost trigger would capture marginal but significant landscape renovations that would otherwise be excluded based on the 2,500 sq. ft. renovation size threshold. When major renovations are happening to a

		or renovations to the building with a valuation exceeding \$200,000.00 requiring a building permit.	building, it is as if a new development is being constructed, and therefore this cost trigger is simply capturing landscape renovations that are similar in scope to new development at the same size threshold as the new development MWELo provision (500 sq. ft.).
<b>ETAF for Special Landscaped Areas</b> – reduce from 1.0 to 0.8	§491	(ITP) (s) The ETAF for a Special Landscape Area shall not exceed <del>1.0</del> <u>0.8</u> .	Irrigation efficiency and water conservation should be cultivated as a standard practice for all plants, including special landscaped areas that are capable of thriving with an ETAF of 0.8. By decreasing the ETAF for these areas from 1.0 to 0.8, MWELo would help instill a consistent conservation ethic rather than create an over-watering loophole.
<b>Special Landscaped Areas</b> – expand the designation to include all areas irrigated with non potable water sources including graywater and rainwater	§491	(sss) “Special Landscape Area” (SLA) means an area of the landscape dedicated solely to edible plants; recreational areas; areas irrigated with recycled water, <u>graywater, or rainwater</u> ; or water features using recycled water	By designating landscaped areas irrigated with non potable water as ‘special landscaped areas,’ MWELo would incentivize the use of alternate water sources beyond municipality-provided recycled water such as graywater and rainwater.
<b>Turfgrass Slope</b> – reduce allowable turf slope with spray irrigation from 25% to 10%	§492.6	(a)(1)(D) Turf is not allowed on slopes greater than <u>10%</u> where the toe of the slope is adjacent to an impermeable hardscape and where <u>10%</u> means 1 foot of vertical elevation change for every 10 feet of horizontal length.	Irrigating turf with overhead spray on slopes of 25% without generating runoff is extremely difficult. Additionally, turf areas with slopes of 25% are not ‘functional’ in that they do not support many or most recreational activities. Given that MWELo seeks to eliminate overspray and runoff, and non-functional turf, it follows that turf should not be allowed on such steep slopes.
<b>Invasive Plants</b> – prohibit invasive plants	§492.6	(a)(1)(G) The use of invasive plant species, such as those listed by the California Invasive Plant Council, is <u>prohibited</u>	Prohibiting the use of invasive plants would support local, regional, and state-wide efforts to protect watersheds by reducing the spread of these ecologically harmful plants and by decreasing the need for costly and time-intensive removal efforts.
<b>Pool/Spa Covers</b> – require pool/spa covers	§492.6	(a)(2)(D) Pool and Spa Covers are <u>required</u> .	Having pool and spa covers required on new development/renovations would increase their appropriate use by the end user. This is a straight-forward requirement that can significantly reduce pool and spa water consumption.
<b>Irrigation Schedule &amp; Hydrozone Maps</b> – require that a copy of the irrigation schedule and the associated hydrozone map is left on site with the automated irrigation controller itself	§492.10 Appendix C (Part 3)	(a)(6) <u>addition: Current versions of irrigation schedules and landscape hydrozone maps shall be placed and maintained in the appropriate irrigation controller housing and shall include relevant information necessary to adjust the scheduling as needed considering all the parameters listed in §492.10(a)(4-5).</u>	The inclusion of readily accessible and detailed irrigation schedules, hydrozone maps, and scheduling tools - physically associated with the irrigation controller – would make it easier for landscape managers (internal staff or third-party contractors, e.g., auditors) to identify key scheduling factors and to setup and maintain an irrigation system to efficiently meet the needs of the landscape. The necessary institutional knowledge would be at the finger-tips of the individual(s) who is best able to implement best practices with the information provided.
<b>Irrigation Efficiency</b> – require no overspray or runoff to receive certificate of completion	§492.12	(c)(2) <u>addition: Prevention of overspray and runoff must be confirmed during the irrigation audit in order for the local agency to accept the certificate of completion.</u>	Though the requirement for no overspray or runoff is implied throughout MWELo (e.g., §492.7 (a)(1)(U)(3)), it should be stated clearly that a local agency is not to approve a certificate of completion without an audit report that confirms the absence of overspray and runoff under regular irrigation scheduling conditions. If the irrigation system is not achieving efficient watering immediately after installation and original scheduling, it is unlikely to ever achieve compliance by improving efficiency over time.
<b>Audit Sampling</b> –	§492.12	(b) In large projects or projects with multiple landscape installations (i.e., production home developments) an auditing rate of 1 in 7 lots or approximately 15% will satisfy this requirement.	Revisit the audit sampling allowance for large projects to ensure the appropriate selection of the landscapes to be sampled for audit, the criteria for acceptance of aggregated results of sampling, and requirements for unaudited sites if any sampled sites fail the audit.

<b>Rainwater Retention</b> – require the retention of rainwater from roofs	\$492.16	(d) Landscaped areas <u>must</u> be designed for capture and infiltration capacity that is sufficient to prevent runoff from impervious <u>roof</u> surfaces from either: the one inch, 24-hour rain event, or the 85th percentile, 24-hour rain event [...]	A discrete and actionable step towards making the use of alternate water sources a common practice, this recommended revision would require property managers/developers to act on a downspout re-direct, moving their roof drainage into permeable ground or rainwater cisterns. This revision would augment potable water supplies used for irrigation and would help to replenish groundwater and lighten the burden on already-stressed stormwater systems.
<b>Public Education</b> – provide information on how to hire trained landscaped professionals	\$492.17	(ITP) (a)(2), (b)(2) <u>addition: Information available shall include detailed specifications on how to hire trained and licensed landscape architects, contractors, designers and maintenance workers and the benefits of using such professionals.</u>	Permitted renovation applicants and model home owners should be provided with constructive educational material on how to hire qualified landscape workforce. These workforce hires should be qualified individuals who are capable of maintaining an MWELO-compliant landscape at peak efficiency and prime aesthetic appeal. It is well understood that landscapes need quality maintenance, and a homeowner provided with the information on how and why to hire qualified workforce has an advantage in achieving or sustaining the potential water efficiency benefits associated with MWELO compliance.

**Table 2:** General recommendations for improving the efficacy of MWELO; an (ITP) annotation indicates the recommendation was pulled directly from the final set of Draft ITP MWELO Recommendations

Topic	Recommendation
<b>MWELO Applicability:</b> addressing water use on Existing Landscapes	(ITP) Based on the ITP’s review of the Expedited Recommendations version of the MWELO and its recognition that some initial ITP recommendations have not been adopted by DWR, the ITP reaffirms its recommendation that MWELO should also address water use efficiency <u>on existing landscapes</u> .
<b>Workforce Education:</b> supporting the proper installation and management of landscapes through increased workforce knowledge	(ITP) To work towards improving workforce education, the ITP recommends that DWR consider adding the following information about continuing education to MWELO during future revisions. <u>Continuing Education</u> <i>Given the on-going need to continuously build knowledgeable landscape practitioner:</i> (1) DWR shall or may approve a designated 501(c)(3) non-profit, to maintain curriculum available to support the designing, installing and managing water efficient landscapes for landscape professionals. (2) DWR shall work with other state agencies as appropriate to seek mandates for continuing education requirements for professions managing water on landscapes.
<b>MWELO Enforcement:</b> Aligning with the CalGreen Title 24 revision process to maximize enforcement	To maximize MWELO enforcement, the ITP recommends establishing a standardized MWELO revision process on a triennial cycle that complements the CalGreen Title 24 triennial revision cycle. The MWELO revision cycle would be staggered with the CalGreen cycle in order to finish MWELO revisions in advance of the finalized CalGreen revisions. The MWELO revisions would then be ready to be adopted in the subsequent round of CalGreen revisions. This standardized revision process between MWELO and CalGreen would allow for building departments to support MWELO enforcement while avoiding costly, politicized, and excessive or redundant administrative update processes that seek to continually adapt one set of regulations or the other in an ad hoc manner.  Alternatively, DWR and CalGreen can work to creatively align their revision processes in a different, streamlined and harmonized system.